

IMPROVEMENT OF PERFORMANCE IN MODEL-BASED OPC ENGINE UTILIZING EFFICIENT POLYGON PINNING METHOD

ABSTRACT OF THE DISCLOSURE

Methods, and a program storage device for executing such methods, for performing model-based optical proximity correction by providing a mask matrix having a region of interest (ROI) and locating a plurality of points of interest within the mask matrix. A first polygon having a number of vertices representative of the located points of interest is computed, followed by determining a spatial relation between its vertices and the ROI. The vertices of the first polygon are then pinned to boundaries of and within the ROI such that a second polygon is formed on the ROI. The process is repeated for all vertices of the first polygon such that the second polygon is collapsed onto the ROI. This collapsed second polygon is then used to correct for optical proximity.